



Goddard Space Flight Center 2009 Sample Student Projects

Required Academic Level

Graduate/Masters,
Graduate/Doctorate

Category

Engineering

Subcategory

Communications networks

Project Title

Laser Ranging in Lunar Laser Communications Demonstration (LLCD) for the Lunar Atmosphere & Dust Environment Explorer (LADEE) Mission.

Project Description

Develop a plan, specification and requirement on real time laser ranging experiment using Lunar Laser Communications Demonstration (LLCD) in the mission of Lunar Atmosphere and Dust Environment Explorer (LADEE).

Mentor's Expectation of Student

1. Understand space laser ranging in general. 2. Understand the laser ranging with Lunar Laser Communications Demonstration (LLCD) in the mission of Lunar Atmosphere and Dust Environment Explorer (LADEE). 3. Develop a plan for laser ranging with LLCD which include: 3.1 The scope of the project. 3.2 The objectives of the project. 3.3 The contributions of the project to the science community. 3.4 The objectives/deliverables of the project. 3.3 The implementation procedure of the project. 3.4 The constrain/risk factors and the mitigation recommendations.

Discipline of Project and/or Background Needed to successfully complete the project

Electrical Engnr

Skills

Analysis, Problem Solving, Research, Technical Writing, Windows, Word, Powerpoint